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Biological treatment of sewage from petroleum-chemical production

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Abstract

Sewage waters from styrene and propellent oxide production are studied for the possibility of their local aerobic treatment using immobilized microorganisms. Modelling of sewage treatment in the plant consisting of four successively connected biotanks with immobilized microflora has proved the ability of 95-97% treatment from organic pollutants whose initial concentration corresponds to COD 5.2 g/l. Gram-negative bacteria and, in the first place, strain SP1, whose portion in the successively functioning biotanks increased from 21 to 95%, are of great significance in treatment of real industrial sewage of the above production.